

**ATTACHMENT IID: SPECIAL CONDITIONS - INCINERATORS
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IID encompasses the following incinerators:

Table 1D: Incinerators

Unit ID No.	Location	Waste Incinerated	Manufacturer	Model	No. of Chambers	Capacity	Fuel Type
I-1097	Bishop Point	Photographic Material/Type "O"	National Incinerator, Inc.	LI750	3	750 lb/hr	Propane
I-83366	Fort Kamehameha Road	Type "O"	National Incinerator, Inc.	LI750	3	750 lb/hr	Propane

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or name plate on each incinerator, which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Type "O" Waste Incinerator, Model No. LI750, Unit ID No. I-83366

a. Operational Limitations

- i. Only properly trained personnel shall operate the incinerator. A copy of the operator's manual shall be available in the vicinity of the incinerator.
- ii. The incinerator shall be charged only with Type "O" waste consisting of waste paper, wood, and cardboard cartons.
- iii. The maximum single charge for the incinerator shall not exceed 250 pounds of waste.
- iv. The maximum incineration rate for the incinerator shall not exceed 750 pounds of waste per hour.

- v. The set point on the temperature controller/indicator of the secondary chamber shall be set and maintained at a minimum of 1,450 °F. Incineration shall not begin until the upper chamber (secondary chamber) has attained an operating temperature of 1,450 °F or greater. The incinerator shall not be used unless the pyrometer control for the secondary chamber is functioning properly.

b. Fuel Specifications

The Type "O" Waste Incinerator shall be fired only on propane or liquified petroleum gas (LPG).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

2. Photographic Material/Type "O" Waste Incinerator, Model No. LI750, Unit ID No. I-1097

a. Operational Limitations

- i. Only properly trained personnel shall operate the incinerator. A copy of the operator's manual shall be available in the vicinity of the incinerator.
- ii. The incinerator shall be charged only with photographic material waste consisting of film material and Type "O" waste with composition as specified in Attachment IID, Special Condition B.1.
- iii. The maximum single charge for the incinerator shall not exceed 250 pounds of waste.
- iv. The maximum incineration rate for the incinerator shall not exceed 750 pounds of waste per hour.
- v. The set point on the temperature controller/indicator of the secondary chamber shall be set and maintained at a minimum of 1,450 °F. Incineration shall not begin until the upper chamber (secondary chamber) has attained an operating temperature of 1,450 °F or greater. The incinerator shall not be used unless the pyrometer control for the secondary chamber is functioning properly.

b. Fuel Specifications

The incinerator for photographic material/Type "O" waste shall be fired only on propane or LPG.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

3. Maximum Emission Limits

The particulate emissions from each incinerator shall not exceed 0.20 pounds per 100 pounds of waste charged.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-35, §11-60.1-90)

4. Visible Emissions

For any six (6) minute averaging period, each incinerator shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during the buildup of a new fire or equipment breakdown, each incinerator may exhibit visible emissions greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

5. Maintenance

Each incinerator shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule to ensure proper operation of the equipment as recommended by the manufacturer or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

6. Additional Monitoring

Although not required at this time, the Department of Health, if so desires, may at any time require the permittee to install and operate an opacity meter or continuous emission monitor, or to conduct a stack test or ambient air quality monitoring.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request is to be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on each incinerator for purposes of the requirements specified in Attachment IID, Special Condition B.5. As a minimum, these records shall include: the date of the inspection/work; name and title of personnel performing inspection/work; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. Incineration Charge

The permittee shall maintain the following records for the incinerators for purposes of the operational limitations specified in Attachment IID, Special Conditions B.1 and B.2 and annual emissions reporting:

- a. The date and time of the incineration;
- b. Composition of charge;
- c. Length of incineration time;
- d. Total weight in pounds of charge;
- e. Calculated incineration rate [total weight (lbs) ÷ length of incineration time (hr)];
- f. The secondary chamber's temperature (°F) at the start of incineration; and
- g. Name of operator.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 16, 17 and 25, respectively:

- a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
- b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

2. Deviations

The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional source performance testing, more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, a compliance certification pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;

- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The enclosed **Annual Emissions Report Form: Incinerators** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the following:

- a. The type of fuel fired by the incinerator burners.
- b. Records on the incineration charge, including the composition of charge, charge weight, and incineration rate for both incinerators.
- c. The secondary chamber temperature at start of incineration for the incinerators.

- d. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring Report Forms: Type "O" Waste Incinerator, Photographic Material/Type "O" Waste Incinerator, and Visible Emissions** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90).

**ATTACHMENT IIA: SPECIAL CONDITIONS - BOILERS
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. Attachment IIA encompasses the following boilers:

Table 1A: Heating Units - Boilers

Unit ID No.	Building Location	Manufacturer	Model	Heat Input (MMBtu/hr)	Fuel
B-906A	906	Cleaver Brooks	M4P-2000	2.0	Diesel No. 2
B-906B	906	York Shipley	SPHV-40-2	1.3	Diesel No. 2
B-1860A	1860	Aztec	5-4-205	2.1	Diesel No. 2
B-1860B	1860	Aztec	5-4-205	2.1	Diesel No. 2

The following boiler units are also regulated under this permit as a result of the aggregate heat input. The boiler units are as follows:

Table 1B: Other Heating Units (Total Heat Input > 5 MMBtu/hr) -Boilers

Unit ID No.	Building Location	Manufacturer	Model	Heat Input Capacity (MMBtu/hr)	Fuel
B-2045A	2045	Polysield	3.8P90AQ	0.540	Diesel No. 2
B-2045B	2045	Polysield	3.8P90AQ	0.540	Diesel No. 2
B-2010	2010	York Shipley	300TVB 16	0.536	Diesel No. 2
B-924	924	Bock	361	0.274	Diesel No. 2
B-1055	1055	Bock	361	0.417	Diesel No. 2
B-1120	1120	Bock	361	0.420	Diesel No. 2
B-1815A	1815	Bock	361	0.420	Diesel No. 2
B-1815B	1815	Bock	361	0.420	Diesel No. 2
B-1843A	1843	Bock	361	0.420	Diesel No. 2
B-1843B	1843	Bock	361	0.420	Diesel No. 2

Unit ID No.	Building Location	Manufacturer	Model	Heat Input Capacity (MMBtu/hr)	Fuel
B-1852A	1852	Bock	51PP	0.154	Diesel No. 2
B-1852B	1852	Bock	51PP	0.154	Diesel No. 2
B-1854A	1854	Bock	51PP	0.154	Diesel No. 2
B-1854B	1854	Bock	51PP	0.154	Diesel No. 2
B-1856A	1856	Bock	51PPC	0.154	Diesel No. 2
B-1856B	1856	Bock	51PPC	0.154	Diesel No. 2
B-2019A	2019	Bock	5/3000EHOV	0.440	Diesel No. 2
B-2019B	2019	Bock	5/3000EHOV	0.440	Diesel No. 2
B-2019C	2019	Bock	5/3000EHOV	0.440	Diesel No. 2
B-2019D	2019	Bock	5/3000EHOV	0.440	Diesel No. 2
TOTAL HEAT INPUT (MMBtu/hr)				7.091	

(Auth.: HAR §11-60.1-3)

- The permittee shall attach an identification tag or name plate on each equipment, which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to each boiler at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Fuel Specifications

All boiler units shall be fired only on fuel oil No. 2 with a maximum sulfur content not to exceed 0.5 % by weight.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

2. Maintenance

Each boiler shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule to ensure proper operation of the equipment as recommended by the manufacturer or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

3. Visible Emissions

For any six (6) minute averaging period, each boiler shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during the start-up, shutdown, or equipment breakdown, each boiler may exhibit visible emissions greater than twenty (20), but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Total Fuel Usage and Specification

Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), date of delivery, and amount (gallons) of fuel delivered to the site for the boilers shall be maintained for purposes of the fuel limitation specified in Attachment IIA, Special Condition B.1 and annual emissions reporting requirements. Fuel sulfur content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on each boiler for purposes of the requirements specified in Attachment IIA, Special Condition B.2. As a minimum, these records shall include: the date of the inspection/work; name and title of personnel performing inspection/work; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification by the permittee, The Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request is to be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions, Condition Nos. 17 and 25, respectively.

- a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- b. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Annual Emissions Report Form: Cleaning Solvent** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written report to the Department of Health for monitoring purposes. The report shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include documentation of the use of any halogenated solvent or exceedances of the freeboard ratio.

The enclosed **Monitoring Report Form: Organic Solvent Cleaners** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Monitoring/Annual Emission Report Form: Fuel Consumption and Certification Boilers** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written reports to the Department of Health. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the following:

- a. The type of fuel fired by the boilers and the fuel consumption (gallons) for the reporting period. Include the maximum sulfur content of the fuel(s) fired.
- b. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring/Annual Emissions Report Form: Fuel Consumption and Certification Boilers** and **Monitoring Report Form: Visible Emissions** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90).

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0209-01-C**

October 23, 2000

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

(Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be wilfully defaced, altered, forged, counterfeited, or falsified.

(Auth.: HAR §11-60.1-6; SIP §11-60-11)²

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)²

4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.

(Auth.: HAR §11-60.1-7)

5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the Regional Administrator for the U.S. Environmental Protection Agency (EPA).

(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)

6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections, 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:
- The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date.
 - The **actual date of construction commencement** within fifteen (15) days after such date.
 - The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department of Health to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department of Health copies of records required to be kept by the permit. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department of Health but also directly to the U.S. EPA Administrator along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department of Health in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
- Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - The expected length of time that the air pollution control equipment will be out of service;
 - The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)²

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-97, in the event any emission unit, air pollution control equipment, or related equipment breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit, the permittee shall immediately notify the Department of Health of the failure or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the failure or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:**

- a. Identification of emission points;
- b. Magnitude of the excess emissions;
- c. Time and duration of the excess emissions;
- d. Identity of the process or control equipment causing the excess emissions;
- e. Cause and nature of the excess emissions;
- f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
- g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
- h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)²

18. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

(Auth.: HAR §11-60.1-90)

19. The permittee may request confidential treatment of any records in accordance with HAR section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

20. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

- a. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions, of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The Department of Health may extend the time periods specified in Standard Condition No. 20 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

22. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

23. All certifications shall be in accordance with HAR, section 11-60.1-4.

(Auth.: §11-60.1-4, HAR §11-60.1-90)

24. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

25. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)²

26. Application for permit renewal shall be submitted a minimum of twelve (12) months prior to the date of permit expiration on forms furnished by the Department of Health in accordance with HAR, section 11-60.1-101. In no event shall a renewal application be submitted more than eighteen (18) months before the date of expiration.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5(a)(1)(iii))¹

27. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

28. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, sections 11-60.1-85 and 11-60.1-86. As specified in HAR, section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA Regional Administrator once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

29. Any document (including reports) required to be submitted by this permit shall be **certified as being true, accurate, and complete by a responsible official in accordance with HAR, sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

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Upon request, all correspondence to the State of Hawaii Department of Health associated with this Covered Source Permit shall have duplicate copies forwarded to:

**Chief
Permits Office, (Attention: Air-3)
Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

² The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIB: SPECIAL CONDITIONS - INTERNAL COMBUSTION ENGINES
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. Attachment IIB encompasses the following internal combustion engines:

Table 1B: Internal Combustion Engines

Unit ID No.	Building Location	Power Output (kW)	MMBTU/hr	Fuel
G-658	11641	48	0.163	Gasoline
G-675	11641	48	0.163	Gasoline
G-855	11641	48	0.163	Gasoline
G-856	11641	48	0.163	Gasoline

(Auth.: HAR §11-60.1-3)

2. The permittee shall attach an identification tag or name plate on each internal combustion engine which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Fuel Specifications

The internal combustion engines shall be fired only on gasoline.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

2. Hour Limitations

- a. The total operating hours of internal combustion engine, Unit ID. No. G-855, shall not exceed 730 hours in any rolling twelve-month (12-month) period.
- b. The total operating hours of internal combustion engine, Unit ID. No. G-856, shall not exceed 730 hours in any rolling twelve-month (12-month) period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Maintenance

Each internal combustion engine shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule to ensure proper operation of the equipment as recommended by the manufacturer or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

4. Visible Emissions

For any six (6) minute averaging period, each internal combustion engine shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during the start-up, shutdown, or equipment breakdown, each internal combustion engine may exhibit visible emissions greater than twenty (20), but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Total Fuel Usage and Specification

Fuel purchase receipts, showing the fuel type, date of delivery, and amount (gallons) of fuel delivered to the site for the internal combustion engines shall be maintained for the purposes of annual emissions reporting and the requirement specified in Attachment IIB, Special Condition B.1.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

3. Hour Limitations

A non-resetting hour meter shall be operated and maintained on the internal combustion engines, Unit ID No. G-855 and G-856, for the permanent recording of the total hours the engines have operated for purposes of the requirements specified in Attachment IIB, Special Condition B.2. The following information, as a minimum, shall be recorded for each internal combustion engine:

- a. The date of the meter readings;
- b. Beginning and ending meter readings for each month;
- c. The total hours of operation for each month; and
- d. The total operating hours on a twelve-month (12-month) rolling basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

4. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on each internal combustion engine for purposes of the requirements specified in Attachment IIB, Special Condition B.3. As a minimum, these records shall include: the date of the inspection/work; name and title of personnel performing inspection/work; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request is to be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 17 and 25, respectively:

- a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- b. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

2. Deviations

The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional stack testing, or more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, a compliance certification pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and

- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Monitoring/Annual Emission Report Form: Fuel Consumption and Certification Internal Combustion Engines** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written reports to the Department of Health. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the following:

- a. The total operating hours of internal combustion engines, Unit ID Nos. G-855 and G-856, on a monthly and twelve-month (12-month) rolling basis.
- b. The fuel consumption (gallons) and type of fuel fired by the internal combustion engines for the reporting period.
- c. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring/Annual Emissions Report Form: Fuel Consumption and Certification Internal Combustion Engines**, **Monitoring Report Form: Visible Emissions**, and **Monitoring Report Form: Operating Hours Internal Combustion Engines** shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90).

**ATTACHMENT IIC: SPECIAL CONDITIONS - AIRCRAFT ENGINE TEST OPERATIONS
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. Attachment IIC encompasses the following equipment:

Table 1C: Aircraft Engine Test Operations

Unit ID No.	Location	Type of Test Cell	Aircraft Engines Tested	Annual Hour Limitation
TC-11666	Hawaii National Guard	Aircraft Engine Test Facility ("Hush House")	F-15 (F-100PW)	416
TC-11665A	Hawaii National Guard	Portable Test Stand	F-15 (F-100PW)	None
TC-11665B	Hawaii National Guard	Portable Test Stand	C-130 (T-56-15)	None

(Auth.: HAR §11-60.1-3)

Section B. Operational and Emission Limitations

1. Operating Hours

Static test firing of F-15 jet engines utilizing the power check pad with noise suppressor at the aircraft engine test facility ("hush house") shall not exceed 416 hours in any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Hours of Operation

The permittee shall maintain a log for the aircraft engine test facility ("hush house") with noise suppressor, Unit ID No. TC-11666 that records the operation parameters for the jet engine power check pad (testing facility). The log shall include, at a minimum, the test date, testing mode (i.e., idle, approach, intermediate, military, or afterburner), and time duration of each mode for purposes of the operation limitation specified in Attachment IIC, Special Condition B.1.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Fuel Consumption

Fuel purchase receipts, documenting the type of fuel fired by the aircraft engines tested and the fuel consumption shall be maintained for each aircraft engine test facility for purposes of annual emissions reporting requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 17 and 25, respectively:

- a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- b. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, 11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

2. Deviations

The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional source performance testing, more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, a compliance certification pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Annual Emission Report Form: Fuel Consumption Aircraft Engine Test Facility** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written report to the Department of Health for monitoring purposes. The report shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the operation hours of aircraft engine test facility ("hush house") with noise suppressor, Unit ID No. TC-11666.

The enclosed **Monitoring Report Form: Operation Hours Aircraft Engine Test Facility** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90).

**ATTACHMENT IIE: SPECIAL CONDITIONS - LOAD RACKS
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIE encompasses the following fuel load racks:

Table 1E: Fueling Operations

Unit ID No.	Building/Location	Transfer Operation (Delivery Into)	Type of Fuel
Air Craft Fuel Transfer (ACFT) Fueling Operations			
F-Truck-A	Area 11	Tank Trucks	JP-8
Government Owned Vehicle (GOV) Fueling Operations			
F-Truck-G	Area 11 & Building 1037	Tank Trucks & Government Vehicles	Diesel Gasoline JP-8

(Auth.: HAR §11-60.1-3)

Section B. Operational and Emission Limitations

1. Maintenance

Each load rack shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule to ensure proper operation of the equipment as recommended by inspections or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. The permittee shall maintain records to monitor the throughput (gallons) and type of fuel dispensed through each loading rack for purposes of annual emissions reporting requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on each fuel load rack for purposes of the requirements specified in Attachment IIE, Special Condition B.1. As a minimum, these records shall include: the date of the inspection/work; name and title of personnel performing inspection/work; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions, Condition Nos. 17 and 25, respectively:

- a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- b. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

2. Deviations

The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional stack testing, more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, a compliance certification pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Annual Emissions Report Form: Fuel Loading Racks** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90).

**ATTACHMENT IIF: SPECIAL CONDITIONS - ORGANIC SOLVENT CLEANING UNITS
COVERED SOURCE PERMIT NO. 0209-01-C**

Amended: October 23, 2000

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. Attachment IIF encompasses the following organic solvent cleaning units:

Table 1F: Organic Solvent Cleaning Units (D-Hickam)

Unit ID No.	Building Location	Solvent	Remote Reservoir	Drying Rack
D-1045	1045	Zep Dyna 143	N	Y
D-1055A	1055	Zep Dyna 143	N	Y
D-1055B	1055	PD-680-2	N	Y
D-1055C	1055	Zep Dyna 143	N	Y
D-1055D	1055	PD-680-2	N	Y
D-1055E	1055	PD-680-2	N	Y
D-2002A	2002	Bio T Parts wash - NR	Y	Y
D-2020	2020	Zep Dyna 143	Y	Y
D-2030	2030	PD-680-2	N	Y
D-3044	3044	Zep Dyna 143	N	Y
D-3380	3380	Zep Dyna 143	N	Y
D-3386	3386	Zep Dyna 143	N	Y
D-3400A	3400	Zep Dyna 143	N	Y
D-3400B	3400	Zep Dyna 143	N	Y
D-3416A	3416	Zep Dyna 143	N	Y
D-3416B	3416	Ashland 140	N	Y
D-3416C	3416	Zep Dyna 143	N	Y
D-3424B	3424	PD-680-2	N	Y
D-3425	3425	Zep Dyna 143	Y	Y

Unit ID No.	Building Location	Solvent	Remote Reservoir	Drying Rack
D-3576	3576	Unitek 146	Y	Y
D-4002A	4002	SK 105	Y	Y
D-4002B	4002	SK 105	Y	Y

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or name plate on each equipment, which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational Limitations

1. Federal Regulations

- a. Each cold solvent cleaning degreaser is exempt from the provisions of NESHAP, Subpart T - National Emissions Standards for Halogenated Solvent Cleaning, due to the operational limitation specified in Attachment IIF, Special Condition No. B.1 (b).
- b. At no time shall the permittee use halogenated solvents for cleaning.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

2. Maintenance

Each degreaser shall be maintained in good working condition (i.e., no liquid leaks, tight fitting cover, etc.). The permittee shall follow a regular maintenance schedule to ensure proper operation of the equipment as recommended by the manufacturer or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Freeboard Ratio

A freeboard ratio (FR) of 0.75 or greater shall be maintained. The freeboard ratio is defined by the following formula:

$$FR = H/W, \quad \text{where} \quad H = \text{distance from top of degreaser to the solvent level, and} \\ W = \text{width of the degreaser}$$

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. Covers

The cover shall be closed at all times whenever the degreaser is not being used.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Cleaning Process

The parts being cleaned shall be completely dry before being extracted from the degreaser.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. Storage

Proper storage of the cleaning solvents shall be maintained. All containers or drums containing the cleaning solvents shall be tightly sealed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for a minimum of five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Records Maintenance

The following records shall be maintained for the organic solvent degreaser tanks:

- a. The type and total amount (gallons) of solvent used for purposes of annual emissions reporting;
- b. A log of inspections, maintenance, and any repair work conducted on the organic solvent cleaning units for purposes of the requirements specified in Attachment IIF, Special Condition B.2. As a minimum, these records shall include: the date of the inspection/work; name and title of personnel performing inspection/work; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

- c. Tank dimensions and freeboard ratio for purposes of the operational limitation specified in Attachment IIF, Special Condition B.3.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions, Condition Nos. 17 and 25, respectively:

- a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- b. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-3, §11-60.1-8, §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

2. Deviations

The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional stack testing, or more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, a compliance certification pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;

- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health, including information to determine compliance.

The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

4. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The attached **Annual Emissions Report Form: Cleaning Solvent** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written report to the Department of Health for monitoring purposes. The report shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include documentation of the use of any halogenated solvent or exceedances of the freeboard ratio.

The enclosed **Monitoring Report Form: Organic Solvent Cleaners** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

² The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF HEALTH**

P.O. BOX 3378
HONOLULU, HAWAII 96801

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IT

BRUCE S. ANDERSON, Ph.D. M.P.H.
DIRECTOR OF HEALTH

In reply, please refer to:
EMD - CAB

October 23, 2000

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**
(7099 3220 0004 7345 5891)

00-A438
File No. 0209-01/02/03

Commanding Officer
15th Air Base Wing
United States Air Force
800 Scott Circle
Hickam Air Force Base, Hawaii 96853

Attn: Mr. Melvin E. Muraoka

Dear Commanding Officer:

**Subject: Covered Source Permit (CSP) No. 0209-01-C
Application for Significant Modification No. 0209-03
United States Air Force, 15th Air Base Wing
Various Equipment
Located at: Hickam Air Force Base, Oahu
Date of Expiration: August 1, 2003**

The subject covered source permit is amended in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The issuance of this permit amendment is based on the plans, specifications, and additional information that you submitted as part of your application for significant modification received on March 6, 2000; and the additional information as part of your application received on April 13, May 17, June 1, and June 23, 2000. This permit amendment replaces CSP No. 0209-01-C, as amended on June 7, 2000 under application No. 0209-02, in its entirety. The \$1,000.00 receipt for the application filing fee was mailed to Hickam Air Force Base on April 6, 2000.

The covered source permit is issued subject to the conditions/requirements set forth in the following Attachments:

Attachment I:	Standard Conditions
Attachment IIA:	Special Conditions - Boilers
Attachment IIB:	Special Conditions - Internal Combustion Engines
Attachment IIC:	Special Conditions - Aircraft Engine Test Operations
Attachment IID:	Special Conditions - Incinerators
Attachment IIE:	Special Conditions - Load Racks

Commanding Officer
15th Air Base Wing (USAF)
October 23, 2000
Page 2

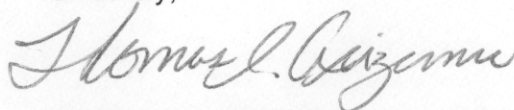
Attachment IIF:	Special Conditions - Organic Solvent Cleaning Units
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emissions Reporting Requirements

The forms for the submission are as follows:

Monitoring/Annual Emissions Report Form:	Fuel Consumption and Certification Boilers
Monitoring/Annual Emissions Report Form:	Fuel Consumption and Certification Internal Combustion Engines
Annual Emissions Report Form:	Fuel Consumption Aircraft Engine Test Facility
Annual Emissions Report Form:	Incinerators
Annual Emissions Report Form:	Fuel Loading Racks
Annual Emissions Report Form:	Cleaning Solvent
Monitoring Report Form:	Operating Hours Internal Combustion Engines
Monitoring Report Form:	Operating Hours Aircraft Engine Test Facility
Monitoring Report Form:	Type "O" Waste Incinerator
Monitoring Report Form:	Photographic Material/Type "O" Waste Incinerator
Monitoring Report Form:	Organic Solvent Cleaners
Monitoring Report Form:	Visible Emissions with the following enclosures:
	a. Visible Emissions Form Requirements State of Hawaii
	b. Visible Emissions Form State of Hawaii; and
	c. The Ringelmann Chart

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Hawaii Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,



THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

MM:lk

Enclosures

c: CAB Enforcement Section

ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION AIRCRAFT ENGINE TEST FACILITY

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: Date:

Facility Name:

Equipment Location:

Equipment Description: Various Internal Combustion Engines

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT):

TITLE:

Responsible Official (Signature):

Unit ID No.	Type of Fuel Fired	Fuel Usage (gal/yr)
Total Combined Annual Fuel Usage (gal/yr)		

- Types of Fuel:
- Residual Oil: Specify Grade, No. 6, 5, or 4;
 - Distillate Oil (No. 2);
 - Liquefied Petroleum Gas, Butane or Propane;
 - Fuel Oil Reclaimed or Spec Used Oil;
 - If Other, specify.

Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency, % reduction
	Yes or No		
	Yes or No		
	Yes or No		

**MONITORING REPORT FORM
OPERATING HOURS AIRCRAFT ENGINE TEST FACILITY**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: Aircraft Engine Test Facility ("Hush House"), Unit ID No. TC-11666

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Month	Total Operating Hours	Total Operating Hours on a 12-Month Rolling Basis	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING/ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION AND CERTIFICATION BOILERS
(Page 1 of 2)**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: Various Boilers

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Unit ID No.	Capacity (MMBtu/hr)	Type of Fuel Fired	Maximum % Sulfur Content by weight	Fuel Consumption First Semi-Annual Period	Fuel Consumption Second Semi-Annual Period	Total Annual Fuel Usage

- Types of Fuel:
- Residual Oil: Specify Grade, No. 6, 5, or 4;
 - Distillate Oil (No. 2);
 - Fuel Oil Reclaimed or Spec Used Oil;
 - Liquefied Petroleum Gas, Butane or Propane;
 - Bagasse in tons/yr;
 - If Other, specify.

Type of Air Pollution Control

In Use?

Pollutant Controlled

Control Efficiency, % reduction

Yes or No
Yes or No
Yes or No

**MONITORING/ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION AND CERTIFICATION BOILERS
(CONTINUED Page 2 of 2)**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

**MONITORING/ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION AND CERTIFICATION BOILERS
(CONTINUED Page 2 of 2)**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

Unit ID No.	Capacity (MMBtu/hr)	Type of Fuel Fired	Maximum % Sulfur Content by weight	Fuel Consumption First Semi-Annual Period	Fuel Consumption Second Semi-Annual Period	Total Annual Fuel Usage
Total Combined Annual Fuel Usage (gal/yr)						

Types of Fuel:

- Residual Oil: Specify Grade, No. 6, 5, or 4;
- Distillate Oil (No. 2);
- Fuel Oil Reclaimed or Spec Used Oil;
- Liquefied Petroleum Gas, Butane or Propane;

- Types of Fuel:
- Residual Oil: Specify Grade, No. 6, 5, or 4;
 - Distillate Oil (No. 2);
 - Fuel Oil Reclaimed or Spec Used Oil;
 - Liquefied Petroleum Gas, Butane or Propane;

- Bagasse in tons/yr;
- If Other, specify.

Type of Air Pollution Control

Yes or No
Yes or No
Yes or No

**ANNUAL EMISSIONS REPORT FORM
FUEL LOADING RACKS**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

THROUGHPUT OF LOAD RACK (Gallons)				
MONTH	TYPE OF FUEL			
	Unleaded Premium	Unleaded Regular	Diesel	Other
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL				

No. of stations: _____

No. of arms per station: _____

**ANNUAL EMISSIONS REPORT FORM
INCINERATORS**

PERMIT NO. 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Unit ID No.	Quantity of Waste Incinerated (Tons/yr)

Types of Fuel: • Residual Oil: Specify Grade, No. 6, 5, or 4; • Fuel Oil Reclaimed or Spec Used Oil;
 • Distillate Oil (No. 2); • If Other, specify.
 • Liquefied Petroleum Gas, Butane or Propane;

<u>Type of Air Pollution Control</u>	<u>In Use?</u>	<u>Pollutant Controlled</u>	<u>Control Efficiency, % reduction</u>
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____

**MONITORING REPORT FORM
TYPE "O" WASTE INCINERATOR
(Page 1 of 2)**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

For Period: _____ Date: _____

Company Name: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: 750 lb/hr National Incinerator Inc. Incinerator, Unit ID No. I-83366,
Model No. LI750

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official Signature: _____

For the reporting period, identify:

1. Type(s) of fuel fired by primary and secondary burners: _____

2. Type(s) of waste charged [circle appropriate number(s)]: 0 1 2 3 4 5 6 7 8

3. All incidences when a single charge exceeded 250 lbs:

Date	Single Charge (lbs)	Comments

4. All incidences when the incineration rate exceeded 750 lb/hr:

Date	Incineration Rate (lb/hr)	Comments

**MONITORING REPORT FORM
TYPE "O" WASTE INCINERATOR
(CONTINUED, Page 2 of 2)**

5. All incidences when the temperature of the secondary chamber was less than 1450 °F at the start of incineration:

Date	Temperature (°F)	Comments

6. All dates and times when the temperature indicator/thermocouple for the secondary chamber was not operating properly and when the temperature indicator/thermocouple was repaired or replaced:

Temperature Indicator/Thermocouple Not Operating Properly		Temperature Indicator/Thermocouple Repaired or Replaced	
Date	Time	Date	Time

MONITORING REPORT FORM
PHOTOGRAPHIC MATERIAL/TYPE "O" WASTE INCINERATOR
(Page 1 of 2)

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

For Period: _____ Date: _____

Company Name: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: 750 lb/hr National Incinerator, Inc. Incinerator, Unit ID No. I-1097,
Model No. LI750

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official Signature: _____

For the reporting period, identify:

1. Type(s) of fuel fired burner(s): _____

2. Type(s) of waste charged [circle appropriate number(s)]: 0 1 2 3 4 5 6 7 8

3. Type(s) of waste charged (other): _____

4. All incidences when a single charge exceeded 250 lbs:

Date	Single Charge (lbs)	Comments

5. All incidences when the incineration rate exceeded 750 lb/hr:

Date	Incineration Rate (lb/hr)	Comments

**MONITORING REPORT FORM
PHOTOGRAPHIC MATERIAL/TYPE "O" WASTE INCINERATOR
(CONTINUED, Page 2 of 2)**

6. All incidences when the temperature of the secondary chamber was less than 1450 °F at the start of incineration:

Date	Temperature (°F)	Comments

7. All dates and times when the temperature indicator/thermocouple for the secondary chamber was not operating properly and when the temperature indicator/thermocouple was repaired or replaced:

Temperature Indicator/Thermocouple Not Operating Properly		Temperature Indicator/Thermocouple Repaired or Replaced	
Date	Time	Date	Time

**MONITORING REPORT FORM
OPERATING HOURS INTERNAL COMBUSTION ENGINES**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: Internal Combustion Engines, Unit ID No. G-855 and G-856

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Month	Total Operating Hours Engine G-855	Total Operating Hours Engine G-855 on a 12-Month Rolling Basis	Total Operating Hours Engine G-856	Total Operating Hours Engine G-856 on a 12-Month Rolling Basis
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

**MONITORING/ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION AND CERTIFICATION INTERNAL COMBUSTION ENGINES**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Unit ID No.	Capacity (kW)	Type of Fuel Fired	Maximum % Sulfur Content by Weight	Fuel Consumption First Semi-Annual Period	Fuel Consumption Second Semi-Annual Period	Total Annual Fuel Usage (gal/yr)
Total Combined Annual Fuel Usage (gal/yr)						

Types of Fuel: • Residual Oil: Specify Grade, No. 6, 5, or 4; • Fuel Oil Reclaimed or Spec Used Oil;
 • Distillate Oil (No. 2); • If Other, specify.
 • Liquefied Petroleum Gas, Butane or Propane;

Type of Air Pollution Control

In Use?

Pollutant(s)
Controlled

Control Efficiency,
% reduction

Yes or No
Yes or No
Yes or No

**ANNUAL EMISSIONS REPORT FORM
CLEANING SOLVENT**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: Various Organic Solvent Cleaners

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

MONTH	TOTAL QUANTITY Purchased (gallons)	TOTAL QUANTITY RECYCLED (gallons)	Quantity DIFFERENCE*	NOTES
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL				

*Quantity Difference = (Total Quantity Purchased/Used) - (Total Quantity Recycled)

**MONITORING REPORT FORM
ORGANIC SOLVENT CLEANERS**

PERMIT NO.: 0209-01-C

PERMIT EXPIRATION DATE: August 1, 2003

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: Various Organic Solvent Cleaners

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

For the reporting period, identify:

1. All incidences when the freeboard ratio of organic solvent cleaning units exceeded 0.75:

Date	Unit ID No.	Freeboard Ratio	Comments

2. All incidences when any halogenated solvents were used in the solvent cleaning units:

Date	Unit ID No.	Name of Solvent	Quantity of Solvent (gallons)	Comments

PERMIT EXPIRATION DATE: August 1, 2003

(Make Copies for Future Use)

Responsible Official (Signature):_____

[illegible]

VISIBLE EMISSIONS FORM REQUIREMENTS STATE OF HAWAII

The following Visible Emissions (V.E.) Form shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in 5 percent increments (i.e., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.
4. Two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at maximum permitted capacity.
7. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed V.E. Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

VISIBLE EMISSIONS FORM STATE OF HAWAII

(Make Copies for Future Use For Each Equipment)

Permit No.: 0209-01-C

Company Name: _____

Equipment and Fuel: _____

Site Conditions:

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

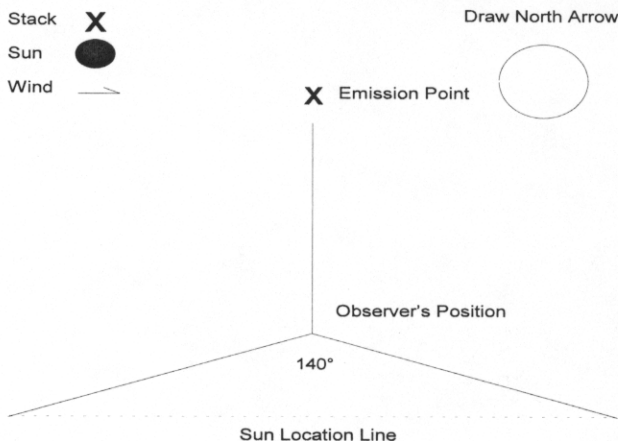
Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____



SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

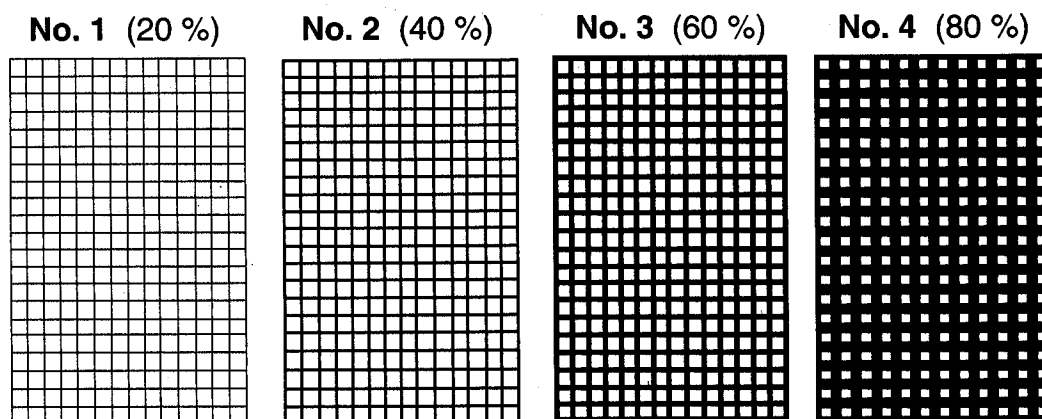
Observation Date and Start Time: _____

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

The Ringelmann Chart

In the late 1800's in Paris, France, Professor Maximilian Ringelmann developed the **Ringelmann Chart** to measure the combustion efficiency of coal-fired boilers. The shade of the smoke plume shows how well a boiler is operating - the poorer its combustion efficiency, the more unburned carbon particles in the smoke and the darker the plume.

Professor Ringelmann's chart established four measured shades of gray between white, valued at zero, and black, at five. These specific shades of gray, Ringelmann No. 1 to Ringelmann No. 4, can be accurately reproduced by placing a grid of black lines of a given width and spacing on a white background. Viewed from a distance, the grid lines and background merge into the shades of gray, to be compared to the shade of the smoke plume.



Ringelmann Chart (not to scale)

Regulating Visible Emissions

The Ringelmann Chart became one of the first tools used to measure visible emissions. Introduced into the United States in 1897, it was soon accepted as the standard measure of smoke density and was used by engineers for power plant testing and smokeless combustion studies. In 1910, the Chart was officially adopted as part of the Smoke Ordinance for Boston, Mass.

Many city, state, and federal regulations now set smoke density limits based on the Ringelmann Smoke Chart. Although not originally designed as a regulatory tool to control air pollution, it gives good practical results when used by well-trained observers.